REMARKS

The Final Office Action, mailed January 31, 2006, considered and rejected claims 2, 3, 23, 24, 26-37 and 39-54. Claims 2, 3, 23, 24, 26-37 and 39-54 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement, and further rejected under 35 U.S.C. § 102(a) as being unpatentable over ATVEF (Draft, version 1.1r26 updated 02/02/99).[1]

By this paper, claims 23, 36, 52 and 53 have been amended.[2] No other claims have been added or cancelled, such that claims 2, 3, 23, 24, 26-37 and 39-54 remain pending for reconsideration, and of which the only independent claims at issue are claims 23, 36, 39 and 42.

All of the pending claims are directed to embodiments corresponding to using triggers to present enhanced content to a viewer of an interactive television system. Claim 23, for example, recites a method for displaying content while further preventing a viewer from being interrupted by links to inaccessible enhanced content when the receiver is disconnected is described. The method includes storing customizable configuration information that specifies whether a receiver is connected to, or disconnected from, a bi-directional connection to a remote source, such that the receiver will execute a connected-content trigger and access connected content only when the configuration specifies that the receiver is connected. As further recited, a content trigger is received which links to enhanced content. As further clarified by the above amendment, the content trigger includes a plurality of fields which include at least a location field referencing a location of the enhanced content, and a separate connectivity field which indicates whether the enhanced content is connected content or disconnected content. Based upon the connectivity value within the connectivity field in the content trigger, it is determined whether the content trigger is a connected content trigger or a disconnected content trigger. Upon determining that the connectivity value distinguishes the trigger as a connected-content trigger, and upon determining that the configuration information indicates that the receiver is connected, the

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[1] Although the prior art status and some of the assertions made with regard to the cited art is not being challenged at this time, Applicants reserve the right to challenge the prior art status and assertions made with regard to the cited art, as well as any official notice, at any appropriate time in the future, should the need arise, such as, for example in a subsequent amendment or during prosecution of a related application. Accordingly, Applicants' decision not to respond to any particular assertions or rejections in this paper should not be construed as Applicants acquiescing to said assertions or rejections.

[2] Support for the claim amendments can be found throughout the specification, as originally filed, including but not limited to the disclosure found on pages 2, 4, 6-8 and 11 of the original application and in the originally filed claims.

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connected content trigger is executed to access enhanced content from a remote source over the bi-directional connection. However, upon determining that the connectivity value indicates that the trigger is a disconnected content trigger, whether or not the configuration information indicates the receiver is connected or disconnected, the disconnected-content trigger is executed. The disconnected content trigger identifies enhanced content that is accessed from local storage without the bi-directional connection.

Claim 36 is directed to a corresponding receiver having means for executing a method similar to that recited in claim 23. Claim 39 is also directed to a corresponding which includes the receiver as recited in claim 36, and further includes a transmitter for transmitting video and the trigger with the video. Finally, the last independent claim, claim 42, is directed to a computer program product for implementing the method of claim 23.

Rejections Under 35 U.S.C. § 112, first paragraph

As noted previously, each of the pending claims has been rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement. Applicants respectfully traverse.

The written description is satisfied when the patent specification, including any originally filed claims, "describe the claimed invention in sufficient detail that <u>one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention</u>." *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 U.S.P.Q.2d (BNA) 1429, 1438 (*emphasis added*); *see also* M.P.E.P. § 2163(I). Moreover, support for the claim limitations may be express, implied, or inherent. M.P.E.P. § 2163(I)(B).

When an amended claim is the basis of rejection on the written description requirement, the "examiner has the initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims." M.P.E.P. § 2163(II)(A)(3)(b). Accordingly, the Examiner should undertake a full examination of the specification and the claims, and review such *from the standpoint of one of skill in the art at the time the application was filed.* M.P.E.P. § 2163(II)(A)(2) (*emphasis added*).

Here, the Office Action rejects each of the pending claims by summarily stating that the Examiner "could not find anywhere indicating that once the 'disconnected-content trigger 230' is

executed by the 'connected receiver unit 305', the 'connected' receiver [is] able to thereby access the enhanced content from its local storage without utilizing a bi-directional connection!" (Office Action, p. 2, *emphasis in original*). With regard to the foregoing, it appears that the basis of the rejection is tied to the assertion that the specification fails to explicitly recite the same language that is recited in the claims, without any apparent consideration of what would be understood by a person of ordinary skill in the art based on the express, implied, and inherent teachings of the specification.

Notwithstanding the foregoing, and even though it is not necessary, the claims have nonetheless been amended in a non-substantive way to recite the claimed invention with more specific correlation to the language found in the specification. In particular, claim 23 now recites that "upon determining that the connectivity value distinguishes the trigger as a disconnected-content trigger, regardless of whether the configuration information indicates that the receiver is connected or disconnected, executing the disconnected-content trigger, wherein the disconnected-content trigger identifies enhanced content that is accessed from local storage without the bi-directional connection to the remote source." Applicants respectfully submit that this recitation is clearly supported by the express, implied and inherent teachings of the originally filed application in a manner that would allow a person of ordinary skill in the art to recognize Applicants' possession of the claimed subject matter at the time the application was filed.

For example, the originally filed application describes an embodiment in which a connected receiver 305 and a disconnected receiver 306 receive a disconnected-content trigger 230. (p. 9, ll. 18-21, 11, ll. 12-13). Receiver units 305 and 306 are determined to be connected or disconnected based on configuration data stored in local memory of the receiver. (p. 14, ll. 5-9).

When received, the received disconnected content trigger 230 passes through filters 307 and 310 in receivers 305 and 306, respectively. (p. 11, ll. 16-23). Filters 307 and 310 can each be configured to accept or reject connected-content triggers. (p. 9, ll. 16-17). In other words, the filters in both connected and disconnected receivers can have the same capabilities. As disclosed, an exemplary filter may determine whether to accept or reject triggers by checking the connectivity value of the trigger. (p. 11, ll. 3-8). If the connectivity value is determined to be "true" by the filter, the trigger is considered a connected content trigger. (p. 11, ll. 3-8). If the

connectivity value is determined to be "false" by the filter, the trigger is a disconnected content trigger and associated with disconnected content. (p. 11, ll. 12-15). Upon such a determination, therefore, both disconnected and connected receivers execute the disconnected content trigger associated with disconnected content. (p. 11, ll. 12-23; p. 19, ll. 9-23).

As further illustrated in Figure 2, disconnected content trigger 230 references disconnected content found at a local C drive. This local content is disconnected content. (p. 8, ll. 5-7). As clearly recited in the specification, "disconnected content" is "locally stored information resources that can be accessed without a bi-directional connection to a remote information store." (p. 2, ll. 6-9, 24-27; p. 4, ll. 3-5; p. 6, ll. 15-20). Accordingly, a person of ordinary skill in the art at the time the application was filed would clearly understand that any disconnected content may be accessed without a bi-directional connection to a remote information store, in the manner claimed.

In light of the above, when considered by a person of ordinary skill in the art, the specification clearly discloses: (i) determining that a connectivity value distinguishes the trigger as a disconnected-content trigger; (ii) executing the disconnected content trigger regardless of whether the receiver is connected or disconnected (as specified by the configuration information); and (iii) that disconnected-content triggers identify enhanced content (e.g., locally stored program guides) that are accessed from local storage without a bi-directional connection to the remote source.

Accordingly, in view of the MPEP guidelines and corresponding case law regarding written description requirements, it is clear that the disclosure supports the claim language corresponding to both of the connected and disconnected receivers, the execution of disconnected content triggers to access disconnected content, and that disconnected content is defined to be that which is accessible without a bi-directional connection to a remote source. For at least these reasons, Applicants respectfully submit that a person of ordinary skill in the art, upon considering the express, implied and inherent teachings of the originally filed application, would conclude that Applicants possessed the claimed subject matter at the time the present application was filed, thereby satisfying the written description requirements of 35 U.S.C. § 112, first paragraph.

Rejections Under 35 U.S.C. §§ 102(a)

As clarified by this paper, a received trigger that links to enhanced content includes a plurality of fields, including a location field that references a location of the enhanced content, and a separate connectivity field indicating whether the enhanced content is connected or disconnected content. Further, this separate connectivity field includes a connectivity value which is actually used to determine whether a content trigger is a connected or disconnected content trigger.

Although the ATVEF reference teaches many things with regard to triggers, ATVEF fails to disclose or suggest a method, receiver, system, or computer program product in which a content trigger includes a separate connectivity field indicating whether the enhanced content is connected content or disconnected content **and** where the separate connectivity field includes a connectivity value which is *the basis* of the determination that the content trigger is a connected content trigger or a disconnected content trigger. In fact, to the extent ATVEF discloses any use of a trigger itself to determine whether the trigger addresses remote content (e.g., connected or Transport A) or local content (e.g., disconnected or Transport B), ATVEF merely discloses that the determination is necessarily based on a *URL field* which also identifies the *location* of enhanced content. In this regard, it will be noted that the location field and the connectivity field are distinguished. In other words, ATVEF discloses that the location field, rather than a separate connectivity field is used to determine the type of trigger.

In particular, ATVEF discloses triggers which facilitate the access of enhanced television content with the use of various fields. For example, ATVEF discloses two types of triggers, namely Transport A and Transport B, each of which include the same syntax. (p. 12, section 2.2). This syntax includes the use of various fields, including a URL field, various attribute/value pairs, and a checksum field. (p. 7, section 1.1.5). The URL field identifies the location of the enhanced content to be accessed, typically with a "lid" or "http" scheme. (p. 7, section 1.1.5). The attribute/value pairs define different types of data, including the name or expiration date of the trigger. (p. 7, section. 1.1.5). An additional attribute/value pair includes a script fragment to execute within the page referred to by the URL, while the checksum field detects data corruption. (pp. 7-8, section 1.1.5). For both Transport A and Transport B triggers, a "tve" attribute may further be included to indicate that the content conforms to an ATVEF specification. (pp. 10-11, section 2.1).

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In differentiating between Transport A and Transport B triggers, ATVEF discloses that Transport A triggers require two-way Internet connections to fetch content over HTTP. (p. 11, section 2.1). Transport B triggers do not, however, require a return path. (p. 11, section 2.2). Instead, information which would otherwise be available over the return path (e.g. World Wide Web) is requested from an appropriate server. (p. 12, section 2.2).

In ATVEF, the URL field in the various triggers references remote or local content. (p. 7, section 1.1.5; p. 8-9, section 1.1.6). For example, the URL field may include a "lid" scheme which identifies resources that are stored locally. (p. 9, section 1.1.6). Alternatively, the URL may include a "http" scheme for referencing data available over the Internet. (p. 7, section 1.1.5). Notably, however, the "lid" scheme is implemented in Transport B triggers, while the "http" scheme is implemented in *both* Transport A and Transport B triggers. (p. 11, section 2.1; pp. 11-12, section 2.2).

In view of this, ATVEF clearly does not teach or suggest a content trigger that includes "at least a location field...**and a** *separate* connectivity field" where a determination of "whether the content trigger is a connected content trigger or a disconnected-content trigger" is *"based on a connectivity value within the connectivity field* within the content trigger" as claimed. For example, the "lid," "http" and "ftp" schemes disclosed in the ATVEF reference clearly fail to meet this limitation. In particular, ATVEF expressly teaches that the "lid," "http," and "ftp" schemes are used within the URL or location field to identify the location of the enhanced content. (p. 7, section 1.1.5; p. 12, section 2.2). Accordingly, ATVEF fails to teach wherein a "lid," "http" or "ftp" scheme is within a connectivity field that is *separate from the location field*, and which is the basis of determining the type of content trigger, as claimed in combination with the other recited elements.[3] Indeed, to the extent ATVEF teaches or suggests that such schemes

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[3]   In fact, Applicants respectfully submit that the ATVEF reference fails to even disclose wherein the "lid," "http" and "ftp" schemes are used in any way to determine the type of trigger. In particular, it appears that when a Transport B trigger is sent, an "announcement" is sent allow the receiver to find the trigger. (p. 11, section 2.2). Inasmuch as only Transport B appears to include announcements that precede triggers, the ATVEF system Applicants submit that the presence or absence of an announcement, rather than any content within the trigger, is actually used to determine whether a trigger is Transport A or Transport B.

Moreover, even if a "lid" URL is exclusive to Transport B, ATVEF discloses that the "http" URL can be implemented in both Transport A and Transport B. Accordingly, ATVEF fails to disclose a value or scheme that is exclusive to Transport A which could be the *basis* of a determination of the type of trigger. More specifically, if a trigger with an "http" URL is received, because both Transport A and Transport B support the scheme, ATVEF must consult some other source (e.g. the preceding announcement).

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are or could be used, such a teaching or suggestion is directly contrary to, and teaches away from the recited claim in which a connectivity field is separate from the location and is used to determine the type of trigger.

In addition, "tve" attribute as taught in ATVEF and as relied upon in the Office Action fails to read on the recited method. In particular, ATVEF clearly teaches that the "tve" attribute is <u>not</u> exclusive to the Transport A trigger but, may also be present in Transport B triggers. (pp. 10-11, section 2.1). In particular, ATVEF teaches that the attribute may be present in a Transport B trigger, although it is ignored if present. (p. 11, section 2.1, "This attribute is ignored if present in a trigger in Transport B").

An appropriate question is, therefore, how does the ATVEF system recognize when to ignore or consider the "tve" attribute? As disclosed in ATVEF, the only basis for such a decision is the type of trigger that is received. Clearly, therefore, to know that the "tve" attribute should be ignored or considered, the system must first know whether the trigger is a Transport A trigger or Transport B trigger. In other words, the type of trigger must already be determined *before* the "tve" attribute is even considered. Consequently, inasmuch as the type of trigger is determined before even considering or ignoring the "tve" attribute, it is clear that the "tve" attribute cannot be the *basis of the determination*, as asserted.[4]

In view of the foregoing, Applicants respectfully submit that the invention, as recited in the independent claims, for example, is distinguished from the cited art of record. As such, all of the other rejections to the claims, including the dependent claims, are now moot and do not, therefore, need to be addressed individually at this time.[5] It will be appreciated, however, that

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[4]   The fact that the "tve" attribute cannot be the basis of a determination as to the type of trigger received is even more apparent by a more complete review of Section 2.1 of the ATVEF reference. In particular, the ATVEF reference clearly notes that the "tve" attribute need not be present in a Transport A trigger if the content is not ATVEF content. (p. 11, section 2.1 "If the "tve:" attribute is not present in a transport type A trigger, the content described in the trigger is not considered to be ATVEF content").

[5]   Nevertheless for the record, and by way of example only, Applicants will address various dependent claims which recite elements not taught or suggested by the art of record. For example, claim 46 recites wherein a later time is an end of a delay period beginning upon receipt of the connected-content trigger (for when the configuration information specifies that the receiver is connected). The Office Action recites the teaching by the ATVEF reference of an "expires:time" attribute/value pair as reading on this limitation. ATVEF merely discloses, however, that the "expires:time" attribute/value pair is *within the trigger* and provides an expiration date *after which a trigger link is no longer valid*. Accordingly ATVEF fails to disclose a later time *within the configuration information*, or that the expiration date is a delay period related in any way to connection of the receiver, in the manner claimed.

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Reply to Office Action mailed January 31, 2006

this should not be construed as Applicants acquiescing to any of the purported teachings or
assertions made in the last action regarding the cited art or the pending application. Instead,
Applicants reserve the right to challenge any of the purported teachings or assertions made in the
last action, including any official notice, at any appropriate time in the future, should it arise.

In the event that the Examiner finds remaining impediment to a prompt allowance of this
application that may be clarified through a telephone interview, the Examiner is requested to
contact the undersigned attorney.

Dated this 28 day of April, 2006.

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With respect to claim 53, ATVEF fails to disclose wherein the connectivity field containing the
connectivity value is a value within an attribute/value pair, and wherein the connectivity value specifies whether the
content trigger is a connected content trigger or a disconnected-content trigger. For this teaching, the Office Action
recites the teaching of the "tve" attribute in ATVEF. ATVEF discloses, however, that the "tve" attribute includes a
value which indicates the version number of ATVEF for indicating which specification the content conforms to. (p.
10, section 2.1). The value (i.e., 1.0) accordingly identifies an ATVEF specification, but fails to specify whether a
trigger is a connected or disconnected content trigger, as claimed.

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